

WHAT IS CLAIMED IS:

5 1. A method for attaching a ring electrode to the shaft of a catheter tip section comprising:

 providing a catheter tip section comprising a tubular shaft having at least one lumen extending therethrough and at least one exit hole extending from the outer surface of the shaft of the catheter tip section to the lumen;

10 passing an electrode lead wire through the lumen and out of the exit hole;
 wrapping the portion of the electrode lead wire that extends out of the exit hole around the circumference of the shaft of the catheter tip section at least one full turn;

15 sliding a ring electrode having a proximal portion which forms a flared skirt over the shaft of the catheter tip section and positioning the ring electrode directly over the circumferentially wrapped electrode lead wire;

 swaging the ring electrode to reduce its diameter sufficiently to secure the ring electrode to the shaft of the catheter tip, wherein the diameter of the swaged ring electrode is about the same as the diameter of the shaft of the catheter tip.

20 2. A method for attaching a ring electrode to the shaft of a catheter tip section as claimed in claim 1 wherein the electrode lead wire is wrapped around the circumference of the shaft of the catheter tip section sufficiently tightly so that the outermost surface of the electrode lead wire is generally flush with the
25 outer surface of the shaft of the catheter tip section;

 3. A method for attaching a ring electrode to the shaft of a catheter tip section as claimed in claim 1 wherein the electrode lead wire is wrapped circumferentially around the shaft of the tip section at least two turns.

30 4. A method for attaching a ring electrode to the shaft of a catheter tip section as claimed in claim 1 wherein the electrode lead wire is wrapped circumferentially around the shaft of the tip section and secured thereto in a clove hitch arrangement.

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5 5. A method for attaching a ring electrode to the shaft of a catheter tip
section as claimed in claim 1 wherein the skirt is flared radially outwardly at an
angle of about 4 to about 8 degrees.

10 6. A method for attaching a ring electrode to the shaft of a catheter tip
section as claimed in claim 5 wherein the skirt is flared radially outwardly at an
angle of about 6 degrees.

15 7. A method for attaching a ring electrode to the shaft of a catheter tip
section as claimed in claim 1 wherein the electrode lead wire comprises a non-
conductive coating and the non-conductive coating is removed from the portion of
the electrode lead wire that extends out of the exit hole.

20 8. A method for attaching a ring electrode to the shaft of a catheter tip
section as claimed in claim 1 wherein the shaft of the tip section is heated during
the wrapping step sufficiently to soften the material of the tip section shaft.

25 9. A method for attaching a ring electrode to the shaft of a catheter tip
section as claimed in claim 8 wherein the shaft of the tip section is made of
polyurethane and is heated to from about 90° C to about 110°C during the
wrapping step.